Attachment C
Best Management Practices Plan
NPDES Permit No. MA0003891
General Electric Company
Pittsfield, MA

BEST MANAGEMENT PRACTICES PLAN [1]

A. STORM WATER BMP ACTIVITIES

1. Cleaning and Inspection of Existing Storm Sewer Components [2]

BMP A.1.A - Debris Removal from Manholes and Catch Basins

- Initial inspection and removal of accumulated debris from all outside storm sewer manholes (MHs) and catch basins (CBs) on GE property in Drainage Basins 005, 006, and 009.
- Quarterly inspections for one year of 10 to 15 "select" MHs and CBs in Drainage Basins 005, 006 and 009. Removal of accumulated debris as needed (i.e., when observed debris thickness exceeds approximately 6 inches and prior to the catch basin exceeding 50% of the sediment storage capacity).[3]
- Annual inspection of select MHs and CBs in Drainage Basins 005, 006, and 009. (debris removal as needed).
- Provide summary of completed inspection/cleaning activities in annual BMP report.

BMP A.1.B - Debris Removal from Oil/Water Separators

- Removal of accumulated debris from OWSs 64W, 64X, 64Z, and 119W.
- Performance of annual inspection (including debris thickness measurements) of each active OWS.
- Removal of accumulated debris from OWSs every 2 years, or sooner if average thickness of debris observed during annual inspections exceeds 6 inches.
- Provide summary of completed inspection/cleaning activities in annual BMP report.

BMP A.1.C - Pipeline Cleaning and Inspection

- For active piping within Drainage Basins 005, 006, and 009 where groundwater infiltration/inflow (I/I) is identified through the observation of dry weather flows attributable to I/I (if any), collect representative water samples for volatile organic compound (VOC) analysis prior to any pipe cleaning activities. Following the identification of dry weather groundwater I/I flows, if any, and the subsequent cleaning or potential repair/rehabilitation of the subject piping, collect another

round of water samples for VOC analysis (if I/I is identified) for comparative purposes.

- Within Drainage Basins 005 and 006, perform hydraulic pressure washing of the interior surfaces of approximately **4,700** linear feet (LF) of active storm sewer piping to remove accumulated debris (Figure 1). [4]

- Within Drainage Basins 009, YD 10, YD 11, and YD 12, perform hydraulic pressure washing of the interior surfaces of approximately **2,800** linear feet (LF) of active storm sewer piping to remove accumulated debris (Figure 2). [5]

- Video inspection (following pipe cleaning) of approximately **7,500** LF of existing storm sewer piping in Drainage Basins 005, 006, 009, YD 10, YD 11, and YD 12 to assess pipe integrity (Figures 1 and 2).

- Submit a report (separate from the annual BMP report) summarizing the results of the cleaning and inspection activities.

2. Enhancements to Oil/Water Separators

BMP A.2.A - Short-Term OWS Enhancements

- Modify each OWS discharge from an underflow to overflow arrangement.

- Make reasonable best efforts to increase the water storage volume and solids settling capabilities within each OWS through changes to the physical configuration (e.g., weir plates, baffles, etc.).

- Following completion of short-term enhancements described above, conduct sampling and analysis to assess "baseline" effectiveness of each OWS. For (3) different events (selected to represent various flow conditions within each OWS), collect influent and effluent samples from each OWS. Analyze samples for total PCBs (using modified Method 8082) and total suspended solids (TSS). Samples taken for the study shall be 24-hour, flow-weighted composites. Record OWS flow information and other pertinent operating conditions.

BMP A.2.B - Longer-Term OWS-Related Activities

- Conduct a pilot study at OWS 64Z to evaluate potential for increased solids removal. Potential activities include addition of pre-treatment solids removal equipment, installation of additional structures within OWS to promote solids settling, etc.

- To assess potential effectiveness of above activities, conduct sampling and analysis of OWS 64Z flow during (3) different events (to represent various flow conditions). Collect influent and effluent samples with analysis for total PCBs (using modified Method 8082) and TSS. Samples taken for the study shall be 24 hour flow weighted composites. Record OWS flow information and other pertinent operating conditions.

- Make reasonable best efforts to implement permanent improvements to solids settling capabilities at OWS 64Z. Also, evaluate potential improvements to OWSs 64W and 64X.

- Identify and evaluate potential measures to optimize stormwater management within Drainage Basins 005 and 006 through physical modifications related to the East Street Diversion Structure and existing OWS 64Z discharge/bypass piping network.

3. Physical Modifications to Drainage Basins

BMP A.3.A - Modify 60s Complex to Reduce Storm Water Runoff Bypasses

- Reduce storm water discharges and minimize bypasses of the oil/water separators by implementing measures that reduce the areas of impervious cover at the site. Such measures shall include, where practicable and appropriate, adding soil/vegetation cover over impervious areas such as building floor slabs, paved areas, etc.; designing new surface cover in a manner that facilitates infiltration, including surface grading and contouring; and intentionally compromising the integrity of building floor slabs (but *not* paved areas).

- Make reasonable best efforts to modify, abandon, or replace existing storm sewer piping (including existing Sewer Relief Overflows) to reflect new drainage area conditions following building demolition and other activities in the area.

B. IMPLEMENTATION SCHEDULE AND NOTES - STORM WATER BMP ACTIVITIES

1. Schedule

- Initial cleaning and assessment of manholes, catch basins, and piping (i.e., BMPs A.1.A and A.1.C) within Drainage Basins 006 and 009 will be initiated following the permit modification. Within 30 days of the effective date of the permit modification, GE shall identify to the Agencies the specific schedule for performing all of these activities within six (6) months of the effective date of the permit modification.

- Cleaning of OWSs (i.e., BMP A.1.B) and short-term physical modifications to OWSs (i.e., BMP A.2.A) shall be completed by September 30, 2009.

- The pilot study of OWS 64Z (part of BMP A.2.B) will be performed following the completion of initial cleaning and assessment activities and implementation of short-term enhancements, and will be completed by September 30, 2010.

- Initial cleaning and assessment of manholes and catch basins (i.e., BMP A.1.A) within Drainage Basin 005 will be completed by June 30, 2009, unless there are weather related delays, in which case these activities will be completed by July 31, 2009.

- Initial cleaning and assessment of piping (i.e., BMP A.1.C) within Drainage Basin 005 will be completed by August 31, 2009.

- The specific scope and timing/schedule for the performance of remaining BMPs (i.e., remainder of BMP A.2.B, and BMP A.3.A) is uncertain and dependent on the results of the other BMPs and/or completion of various CD- and Brownfields-related activities. A preliminary timeframe of one to three years is estimated.

- GE will prepare an annual BMP summary report for submittal to the Agencies. That report will describe all completed activities, and provide relevant information and data as appropriate. Other information (e.g., proposed additional BMPs, schedule updates, etc.) will also be provided in the annual summary. This summary is due on March 1 of each year following the effective date of the permit (see Part I.C.4. of permit)

2. Notes

1) In addition to the activities identified in Attachment C, GE will continue to perform BMPs within the GE facility as identified in its *Stormwater Pollution Prevention Plan*.

2) Solid debris may be placed at GE's On-Plant Consolidation Area(s) subject to space limitations, or must be disposed of properly off-site.; water will be treated at GE's 64G Groundwater Treatment Facility (64G GWTF),

3) "Select" MHs and CBs subject to future inspections to be determined based on initial inspection and cleaning activities, as well as location within overall storm sewer network. Scope of future inspections may vary; for example, in response to results of annual inspections and/or ongoing CD and Brownfields activities.

4) Pipe sections in Drainage Basins 005 and 006 subject to cleaning include piping that: was historically cleaned and/or sliplined; is located in potential PCB source areas (e.g., subsurface areas with non-aqueous phase liquids, elevated PCB concentrations in soil, etc.); is located in close proximity to existing discharge outfalls; or likely to remain active following CD and Brownfields activities. In addition, based on the results of the MH and CB cleaning and inspection activities (BMP A.1.A), additional piping may be identified for hydraulic cleaning.

5) Pipe sections in Drainage Basin 009, YD 10, YD 11, and YD 12 subject to cleaning include active piping that may be subject to I/I due to elevation of the piping and groundwater table, and pipe sections where debris has historically accumulated.

C. DRY WEATHER FLOW ELIMINATION AND/OR CONDITION-BASED IMPOSITION OF NUMERIC EFFLUENT LIMITATIONS FOR PCBs

1. In accordance with the BMPs set forth below, the Permittee shall, within twelve (12) months of the effective date of the permit modification, (a) investigate the occurrences of dry weather flow from outfalls 05A, 64T, 006 and 009, (b) identify the source(s) of such flow, and within forty-two (42) months of the effective date of the permit modification, (c) eliminate such flow or, if this is not feasible, then to reduce the discharge to a level that does not have the reasonable potential to cause or contribute to an exceedance of applicable water quality standards.

a. Identification of Dry Weather Flow Sources (12 months)

• GE shall design and implement a "baseline" monitoring program to identify the presence and potential origin of dry weather flows that may discharge through GE outfalls 005 (excluding 64G GWTF), 05A, 006, and 009. This monitoring shall be in addition to routine sampling required in Parts I.A.2, I.A.5, I.A.8, and I.A.12 of the permit. Information obtained from this program (general understanding regarding the location, origin, nature, and quantity of dry weather flow) will support subsequent evaluations concerning possible dry weather flow reduction/elimination measures.
• The "baseline" program shall be designed based on review of available mapping for the GE facility and adjacent areas; the results of the BMP cleaning activities described in Part A of this attachment; available information related to seasonal groundwater elevations and other site considerations; and an initial field reconnaissance of accessible areas within and along the perimeter of the GE facility (e.g., MHs and CBs).
• At a minimum, the "baseline" program shall include a monthly visual inspection of numerous MHs, CBs, pipe sections, and other structures (collectively, "structures") located within, along the perimeter, and/or potentially hydraulically connected to the drainage basins associated with outfalls 005 (excluding 64G GWTF), 05A, 006, and 009. Each structure will be inspected for evidence of dry weather flow. If such flows are observed, qualitative information related to the flow (e.g., potential origin, estimated flow quantity, visual observations, etc.) will be recorded. To the extent practicable, the rate of observed flow will be estimated.
• During implementation of the program, the results of the "baseline" monitoring program will be reviewed, and modifications to the ongoing program will be implemented if warranted. Modifications (if any) will be identified consistent with the objectives of the program (i.e., to identify the presence and possible origin of dry weather flows).
• To account for the potential intermittent and/or seasonal occurrences of dry weather flows (e.g., infiltration of groundwater during seasonal high water table conditions), the "baseline" monitoring program shall be conducted over a several-month timeframe. The duration of the "baseline" monitoring program shall not exceed 12 months, unless specific Agency approval is provided for a longer duration.
• The proposed "baseline" monitoring plan shall be provided to the Agencies for review and comment within 30 days of the effective date of the permit modification. The proposal shall identify specific timeframes for the implementation and completion of "baseline" program, including the submittal of a semi-annual interim status report(s) and a final summary report. The final summary report shall also include GE's initial evaluations and proposals (if any) for additional monitoring (if warranted) and/or dry weather flow reduction/elimination measures.

b. Implementation of Flow Reduction/Elimination Measures (42 months)

• The results of the BMP activities will be evaluated to determine the need for (and if necessary, the scope of) flow reduction/elimination measures ("flow reduction measures"). The evaluation of possible flow reduction measures will

consider the specific circumstances related to each dry weather flow, including the origin/location of the observed flow; frequency, rate, and duration of flow; length and size of affected piping; technical and cost feasibility of potential measures, etc.

• Potential flow reduction measures for dry weather flows that are not related to GE shall be discussed with the City of Pittsfield and Agencies as appropriate. Reasonable best efforts, in consultation with the City, shall be applied to reduce and minimize, or eliminate, offsite flow contributions.

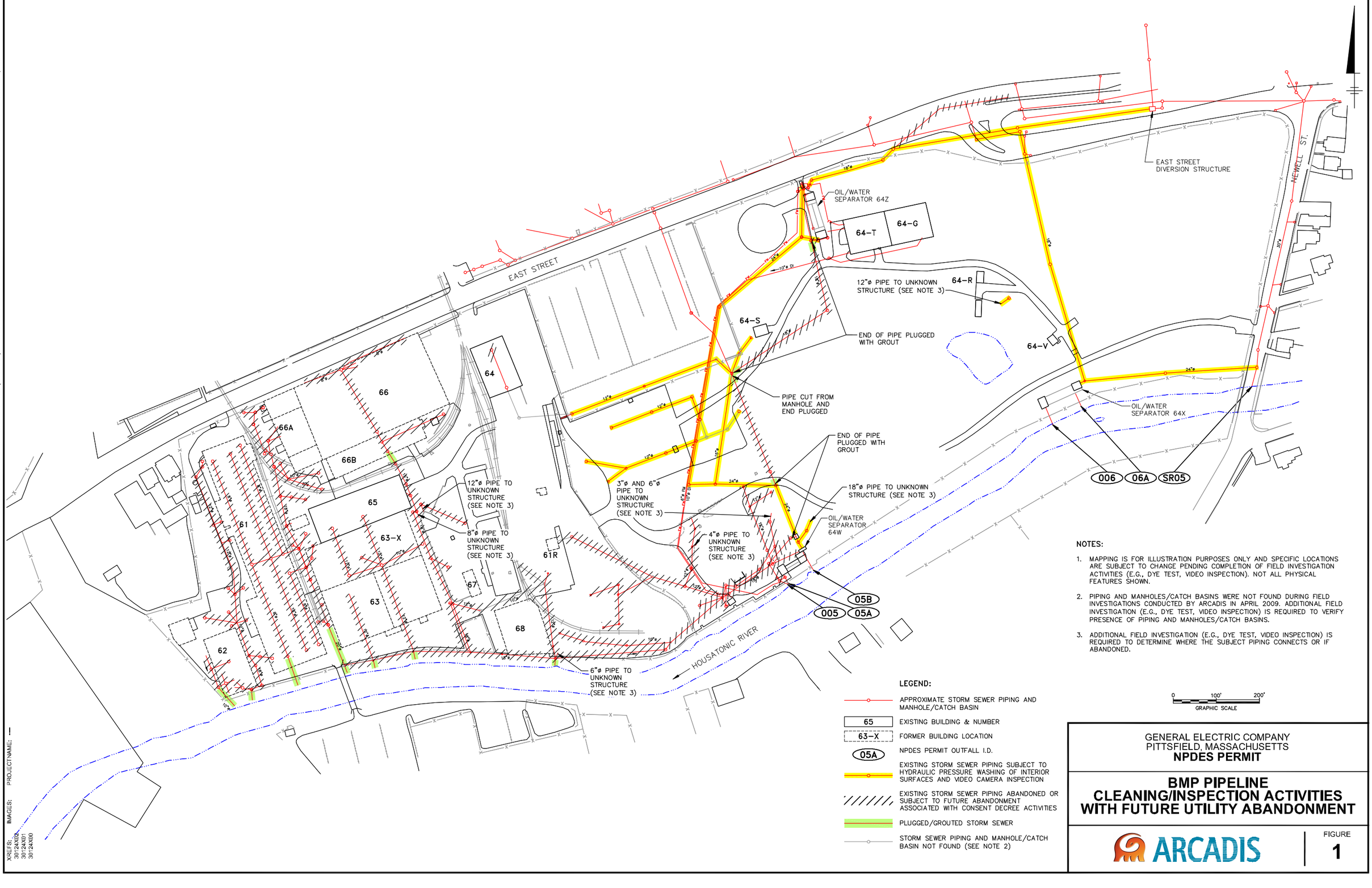
• For each dry weather flow that is identified for flow reduction measures, one or more of the following measures shall be considered and selected based on the evaluations described above: pipeline cleaning and inspection, pipeline abandonment, pipeline replacement, pipeline rehabilitation (e.g., sliplining or grouting), and re-routing of flow. In addition, depending on the nature of the dry weather flow, GE may consider sampling and analysis activities or other assessment efforts to further evaluate the need for and potential scope of flow reduction measures.

• GE shall substantially complete an initial round of flow reduction measures based on the above evaluation within seventeen (17) months of the effective date of the permit modification and shall substantially complete any necessary follow-on rounds of flow reduction measures within twenty-nine months (29) of the effective date of the permit modification.

• In the annual BMP summary report, GE shall document the flow reduction measures that have been performed in the preceding year (since submittal of the last report), the results of monitoring activities, and additional, future BMP measures (if any) that GE has identified. In addition, on approximately a semi-annual basis, GE shall submit a status report to the Agencies that describes the ongoing BMP activities.

c. Dry Weather Monitoring Program

• If measurable dry weather flows remain after the completion of BMP activities, GE may prepare a dry weather monitoring program, in addition to the pollutant monitoring requirements found in Parts I.A.2, I.A.5, I.A.8, and I.A.12 of the permit, necessary to characterize the location, origin, nature, quantity, and quality of such flows.



NOTES:

1. MAPPING IS FOR ILLUSTRATION PURPOSES ONLY AND SPECIFIC LOCATIONS ARE SUBJECT TO CHANGE PENDING COMPLETION OF FIELD INVESTIGATION ACTIVITIES (E.G., DYE TEST, VIDEO INSPECTION). NOT ALL PHYSICAL FEATURES SHOWN.
2. PIPING AND MANHOLES/CATCH BASINS WERE NOT FOUND DURING FIELD INVESTIGATIONS CONDUCTED BY ARCADIS IN APRIL 2009. ADDITIONAL FIELD INVESTIGATION (E.G., DYE TEST, VIDEO INSPECTION) IS REQUIRED TO VERIFY PRESENCE OF PIPING AND MANHOLES/CATCH BASINS.
3. ADDITIONAL FIELD INVESTIGATION (E.G., DYE TEST, VIDEO INSPECTION) IS REQUIRED TO DETERMINE WHERE THE SUBJECT PIPING CONNECTS OR IF ABANDONED.

LEGEND:

- APPROXIMATE STORM SEWER PIPING AND MANHOLE/CATCH BASIN
- 65 — EXISTING BUILDING & NUMBER
- 63-X — FORMER BUILDING LOCATION
- 05A — NPDES PERMIT OUTFALL I.D.
- EXISTING STORM SEWER PIPING SUBJECT TO HYDRAULIC PRESSURE WASHING OF INTERIOR SURFACES AND VIDEO CAMERA INSPECTION
- EXISTING STORM SEWER PIPING ABANDONED OR SUBJECT TO FUTURE ABANDONMENT ASSOCIATED WITH CONSENT DECREE ACTIVITIES
- PLUGGED/GROUTED STORM SEWER
- STORM SEWER PIPING AND MANHOLE/CATCH BASIN NOT FOUND (SEE NOTE 2)

0 100' 200'
GRAPHIC SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
NPDES PERMIT

BMP PIPELINE CLEANING/INSPECTION ACTIVITIES WITH FUTURE UTILITY ABANDONMENT

ARCADIS

FIGURE
1

CITY:SYRACUSE DIVGROUP:ENVCAD DB:DMW LAF AGS LD:DMW PIC:P.KEANEY PM:P.FILIPPETTI TM:P.FILIPPETTI LYR:ON=*;OFF=*REF*
G:\GE\ENVCAD\SYRACUSE\ACT©\B0030124\0001\0010\DWG\ADDENDUM\NPDES-PERMIT\30124G03.DWG LAYOUT: 1 SAVED: 5/4/2009 12:12 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 5/4/2009 12:13 PM BY: SAMOS, ALEX
XREFS:
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30124X01
30124X00
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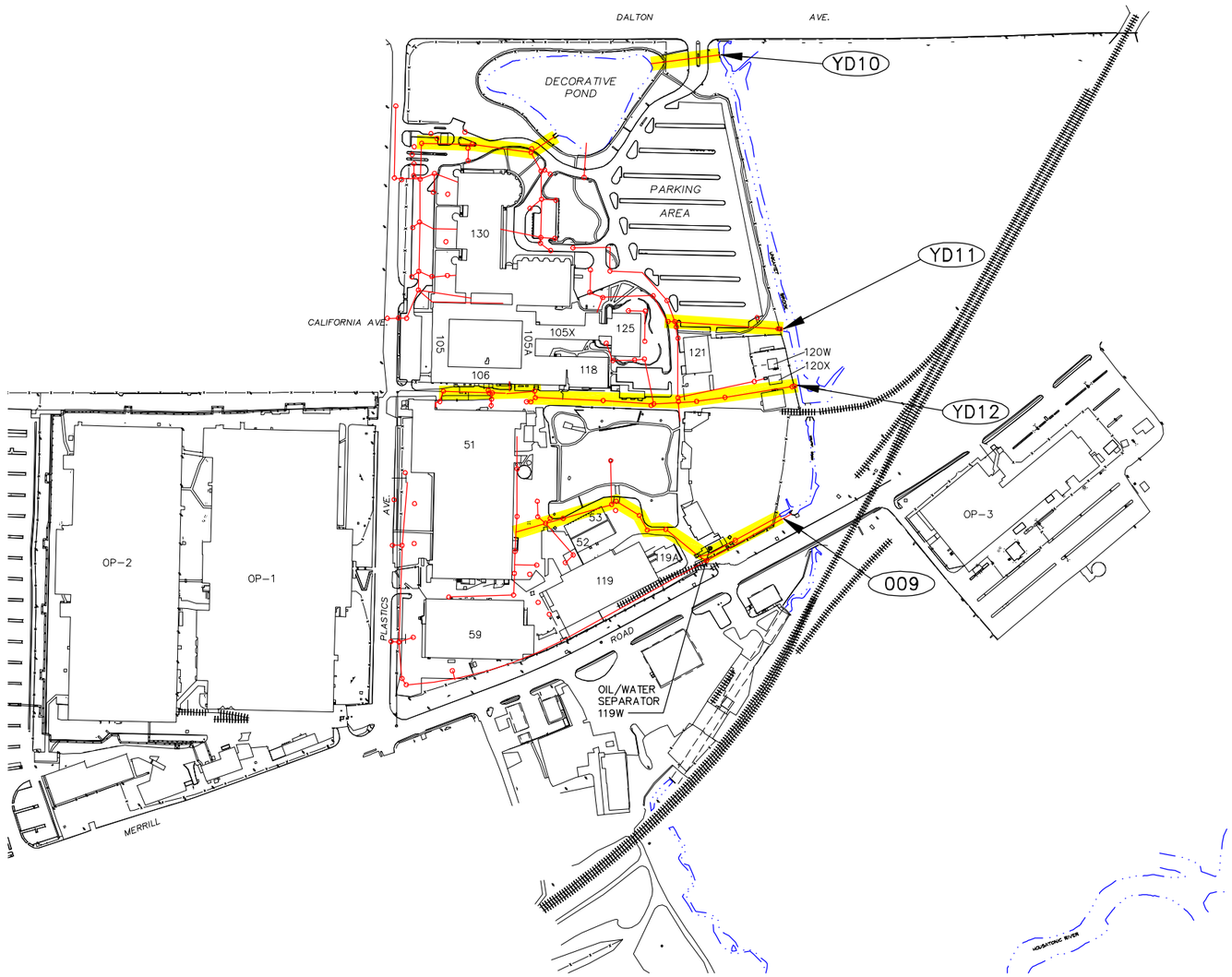

LEGEND:

- 119 — BUILDING AND NUMBER
- FENCING
- APPROXIMATE STORM SEWER PIPING AND MANHOLE/CATCH BASIN
- EXISTING STORM SEWER PIPING SUBJECT TO HYDRAULIC PRESSURE WASHING OF INTERIOR SURFACES AND VIDEO CAMERA INSPECTION
- 009 — NPDES PERMIT OUTFALL I.D.

NOTE:

1. MAPPING IS FOR ILLUSTRATION PURPOSES ONLY AND SPECIFIC LOCATIONS ARE SUBJECT TO CHANGE PENDING COMPLETION OF FIELD INVESTIGATION ACTIVITIES (E.G., VIDEO INSPECTION). NOT ALL PHYSICAL FEATURES SHOWN.

0 400' 800'

APPROXIMATE SCALE

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
NPDES PERMIT

BMP PIPELINE CLEANING/INSPECTION ACTIVITIES

ARCADIS

FIGURE
2